

509,719

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



Rec'd PCT/PTO 01 OCT 2004



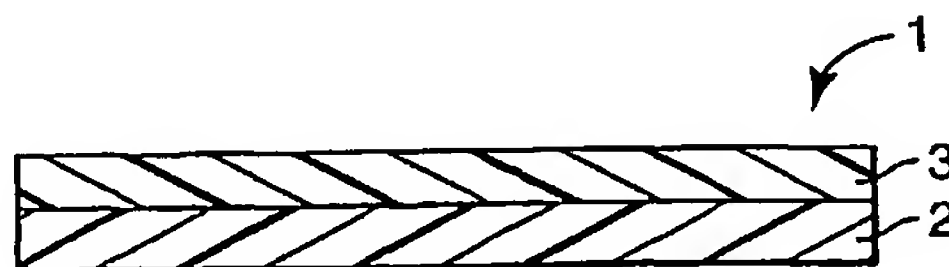
(43) International Publication Date  
20 November 2003 (20.11.2003)

PCT

(10) International Publication Number  
**WO 03/095578 A1**

- (51) International Patent Classification<sup>7</sup>: C09J 7/02, C08F 220/12, C08J 3/28
- (21) International Application Number: PCT/US03/12236
- (22) International Filing Date: 21 April 2003 (21.04.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
2002-135660 10 May 2002 (10.05.2002) JP
- (71) Applicant (for all designated States except US): 3M INNOVATIVE PROPERTIES COMPANY [US/US]; 3M Center, Post Office Box 33427, Saint Paul, MN 55133-3427 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): SUWA, Toshihiro [JP/JP]; 14-14-305, Nishi-Hashimoto 2-chome, Sagami-hara-city, Kanagawa 229-1131 (JP).
- (74) Agents: BLANK, Colene H., et al.; Office of Intellectual Property Counsel, Post Office Box 33427, Saint Paul, MN 55133-3427 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ACRYLIC RELEASE AGENT PRECURSOR, RELEASE AGENT ARTICLE, AND PROCESS FOR PRODUCING RELEASE AGENT ARTICLE



(57) Abstract: The present invention provides an acrylic release agent precursor, which makes it possible to prepare an acrylic release agent efficiently as much as possible in a comparatively small ultraviolet dose, regardless of the component. An acrylic release agent precursor which contains a poly(meth)acrylate ester having a group capable of being activated by ultraviolet radiation and has a storage elastic modulus of  $1 \times 10^2$  to  $3 \times 10^6$  Pa at 20°C and a frequency of 1 Hz, wherein said precursor, after irradiation with ultraviolet radiation, has a contact angle of 15° or more to a mixed solution of methanol and water (volume ratio of 90/10) having a wetting tension of 25.4 N/m.

WO 03/095578 A1